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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,033	11/27/2002	H. Michael Shepard	NB 2006.01; 060925-0601	2767

7590

10/11/2006

Antoinette F. Konski  
FOLEY & LARDNER LLP  
1530 Page Mill Road  
Palo Alto, CA 94304-1125

EXAMINER
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CRANE, LAWRENCE E

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

18

<b>Office Action Summary</b>	<b>Application No.</b> 10/048,033	<b>Applicant(s)</b> SHEPARD, H. MICHAEL	
	<b>Examiner</b> L. E. Crane	<b>Art Unit</b> 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on Marcu 30, 2006 (amendment).  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 17,19-21 and 26-35 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 17,19-21 and 26-35 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 27 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Seq. Error Report</u> .                |

The application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. §1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 C.F.R. §1.821 through §1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

Applicant is given **3 (THREE) MONTHS** from the date of this letter within which to comply with the sequence rules, 37 C.F.R. §1.821 - 1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 C.F.R. §1.821(g). Extension of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 C.F.R. §1.136. In no case may an applicant extend the period for response beyond the SIX MONTH statutory period.

Applicant is referred to the nucleotide sequences at pages 52 and 54 of the instant application's specification. Applicant is also referred to the copy of the "Error Report" of April 3, 2006 attached hereto to provide guidance concerning the most up-to-date information and software which applicant may find useful in rectifying the noted errors.

Claims **1-16, 18 and 22-25** have been cancelled, claims **17 and 19-21** have been amended, the disclosure, Figure 6, and the Abstract have been amended, and new claims **26-35** have been added as per the amendment filed March 30, 2006. No additional Information Disclosure Statements have been received as of the date of this Office action.

Claims **17, 19-21 and 26-35** remain in the case.

35 U.S.C. §101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."

Claim **20** is rejected under 35 U.S.C. §101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. §101. See

for example *Ex parte Dunki*, 153 USPQ 678 (Bd. App., 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149, 149 USPQ 475 (D.D.C. 1966).

Applicant is referred to claim **20** at line 2 wherein the term “for use” may be found. Examiner suggests replacement with the term -- for administration -- or the like.

Applicant’s arguments with respect to claims **1-25** have been considered but are moot in view of the new grounds of rejection. This new ground of rejection was necessitated by applicant’s amendment of the noted claim.

Claims **19, 20, 21, 28, 32, 34 and 35** are objected to because of the following informalities:

In claims **19, 20, 21, 32, 34 and 35** the terms “... L-alaninylphosphoramidate” and “... L-alaninyl monophosphate” are noted, but following consultation with Figure 6, it becomes clear that only the first chemical name is accurate. The action of a *phosphoramidase* should completely remove the L-alaninyl moiety by P-N bond cleavage and therefore the second named substance should be amended to read -- ... monophosphate -- with the term “L-alaninyl” not present. If applicant’s understanding of the biochemical process is otherwise, a complete explanation is respectfully requested because Figure 6 does not provide a clear answer to the apparent inconsistency.

In claim **28** at line 1, the term “X is -Cl, -Br, -I” is missing a key word. Did applicant intend the term to read -- X is -Cl, -Br, **or** -I -- (emphasis added)? Otherwise there is an inherent valence error at the carbons to which variable “X” is attached.

Appropriate correction is required.

Claims **20, 21, 34 and 35** are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims now recite the term “assaying for cell death” (see claim **20** at lines 10-11, but do not further specify the details of any assay. The instant disclosure makes reference to liquid chromatography/mass spectrometry (LC/MS) in a single short paragraph bridging pages 56 and

57 but fails to provide adequate detailed guidance therein to disclose to one of ordinary skill how this analytical tool can be used to execute the method of claims **20, 21, 34 and 35**. Examiner has found no further reference to LC/MS or its application to the analysis method of the instant claims in the remainder of the disclosure. Similarly fluorescence detection is briefly mentioned at page 56, lines 15-19, of the disclosure, but the specifics of its application to achieve the method of claims **20, 21, 34 and 35** do not appear to have been provided therein or elsewhere within the disclosure. Based on these observations examiner believes there is a serious question as to whether the method of claims **20, 21, 34 and 35** was actually in the possession of the instant applicant as of the instant date of filing.

Applicant's arguments filed March 30, 2006 have been fully considered but they are not persuasive.

Examiner notes applicant's amendments, but does not find the amendments to have provided by their entry answers to the questions raised in the previous Office action. Examiner suggests respectfully that the instant disclosure does not provide sufficient evidence of possession (e.g. the guidance of a working example is not present) and therefore that cancellation would be appropriate.

Claims **17, 19 and 26-33** are rejected under 35 U.S.C. §112, first paragraph, because the specification, while being enabled for NB1011 in the treatment of a few specific neoplastic disease conditions, does not reasonably provide enablement for the vast array of neoplastic diseases encompassed by either claim **26** or claim **29** or the treatment of any disease condition with multiple active ingredients as specified generically in claim **29** and specifically in claim **17**. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The fundamental issue here is whether practicing the full scope of the instant invention is possible without undue experimentation. As provided for in *In re Wands* (858 F.2d 731, 737; 8 USPQ 2d 1400, 1404 (Fed Cir. 1988) the minimum factors to be considered in determination of whether a conclusion of "undue experimentation" is appropriate are as follows:

A. The breadth of the claims: The claims (**26 and 29**) are directed to the treatment of a large array of disease conditions with a truly vast array of compounds, wherein all but one of

proposed active ingredients have not been shown to have the claimed activity. In addition, there has been no showing that multiple active ingredients are effective or, if they are effective, how they are to be administered.

B. The nature of the invention: The invention is directed to the treatment of a wide variety of neoplastic diseases by the administration of compound NB1011 and analogues thereof alone or in combination with other compounds allegedly effective in combination therewith.

C. The state of the prior art: Aside from applicant's own work, there is no prior art which reads on the instant claims.

D. The level of one or ordinary skill: The level skill of the ordinary practitioner is very high in re administration of NB1011, but much lower when other active ingredients are at issue and very much lower when multiple active ingredients are specified in a method of treating a neoplastic disease condition.

E. The level of predictability in the art: The art area is predictable in the areas wherein NB1011 has been shown to have anti-neoplastic activity, but in other areas the predictability becomes indeterminate because of the absence of data.

F. The amount of direction provided by the inventor: The applicant has shown data only for the effective administration of NB1011 in a few disease treatments.

G. The existence of working examples: Working examples are limited to the administration of NB1011 alone in the treatment of only a few specific neoplastic disease conditions.

H. The quantity of experimentation needed to make or use the invention based on the content of the disclosure is deemed to be excessive because only a single example (NB1011) and a few diseases effectively treated *in vitro* is an insufficient basis to extrapolate to the very large number of active ingredients and the large number of different disease conditions encompassed by the instant claims. The scope of the claims is excessive and needs to be very substantially narrowed because the small number of enabling exemplifications can not, and do not, adequately support claims of such a broad scope.

Applicant's arguments filed March 30, 2006 have been fully considered but they are not persuasive.

Examiner notes applicant's amendments, but does not find the amendments to have provided by their entry answers to the questions raised in the previous Office action. Examiner suggests respectfully that the instant disclosure does not provide sufficient support for the breadth of the claims are presently in the case and that a substantial narrowing the claims is in order.

Claims **26 and 29** are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims **26 and 29** the variable "Y" is defined, but examiner could not locate any variable "Y" within the generic structure or within any substituent definition. Clarification is respectfully requested.

In claim **29** at lines 36-37, the terms "monophosphate" and "phosphoramidate derivative of an amino acid" are insufficiently detailed to permit the ordinary practitioner to know what particular substituents are being described, and are either confusing or incorrect because the named active ingredients in claim **32** suggest that the functional group present is either -- a mono-phosphate diester -- or -- a phosphate diester with its third valence occupied by a P-N amide linkage to an amino acid --; i.e. the specific embodiments are not clearly included within the scope of the generic claim. See also claim **26** for the same problem.

Claim **29** at lines 2-6 defines a method of treating wherein two active ingredients are present, but fails to define the identity or identities of the first active ingredient (another compound(s) that inhibits thymidylate synthase?), thereby rendering the noted claim incompletely defined.

Applicant's arguments with respect to claims **1-25** have been considered but are moot in view of the new grounds of rejection. This new grounds of rejection were necessitated by applicant submission of new and amended claims.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam*, 686 F. 2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. §1.78(d).

Effective January 1, 1994, a registered attorney or agent or record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 C.F.R. §3.73(b).

Claims **17, 19-21 and 26-35** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1-12** of U. S. Patent No. **6,495,553**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of treatment and the alleged active ingredients are directed to substantially overlapping subject matter.

Claims **17, 19-21 and 26-35** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **36-39** of U. S. Patent No. **6,339,151**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of treatment and the alleged active ingredients are directed to substantially overlapping subject matter.

Claims **17, 19-21 and 26-35** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1-7** of U. S. Patent No. **6,245,750**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of treatment and the alleged active ingredients are directed to substantially overlapping subject matter.



Claims 17, 19-21 and 26-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 56-84 and 86-89 of co-pending Application No. 09/782,721 (for the PG Pubs version, see PTO-892 ref. P1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds and the methods of treatment are overlapping with the instant claimed subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 17, 19-21 and 26-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15-18, 21-23 and 27-50 of co-pending Application No. 09/789,226. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds and the methods of treatment are overlapping with the instant claimed subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 17, 19-21 and 26-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of co-pending Application No. 11/034,036. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds and the methods of treatment are overlapping with the instant claimed subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 17, 19-21 and 26-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of co-pending Application No. 10/051,320 (for the PG PUBS version, see PTO-892 ref. P3). Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds and the methods of treatment are overlapping with the instant claimed subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims **17, 19-21 and 26-35** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1 and 53-83** of co-pending Application No. **10/681,418**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of treatment and the alleged active ingredients are directed to substantially overlapping subject matter.

Claims **17, 19-21 and 26-35** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1-10** of U. S. Patent No. **6,683,061** (PTO-892 ref. **AB**). Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds and the methods of treatment are overlapping with the instant claimed subject matter.

One or more of claims **17, 19-21 and 26-35** of this application conflict with claims **1-33** of Application No. **10/119,927**, claims **56-84 and 86-89** of Application No. **09/782,721**, claims **1-18** of co-pending Application No. **10/051,320**, claims **1 and 53-83** of co-pending Application No. **10/681,418**, claims **1-36** of copending Application No. **11/034,036**, and claims **15-18, 21-23 and 27-50** of copending Application No. **09/789,226**. 37 C.F.R. §1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP §822.

Applicant's arguments filed March 30, 2006 have been fully considered but they are not persuasive.

Applicant has not effectively addressed any of the above rejections but has requested deferral until allowable subject matter has been indicated. Therefore all of the above double patenting rejections have been maintained.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. §1.136(a).

A shortened statutory period for response to this final action is set to expire **THREE MONTHS** from the date of this action. In the event a first response is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. §1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than **SIX MONTHS** from the date of this final action.

Papers related to this application may be submitted to Group 1600 via facsimile transmission (FAX). The transmission of such papers must conform with the notice published in the Official Gazette (1096 OG 30, November 15, 1989). The telephone number to FAX (unofficially) directly to Examiner's computer is 571-273-0651. The telephone number for sending an Official FAX to the PTO is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner L. E. Crane whose telephone number is **571-272-0651**. The examiner can normally be reached between 9:30 AM and 5:00 PM, Monday through Friday.

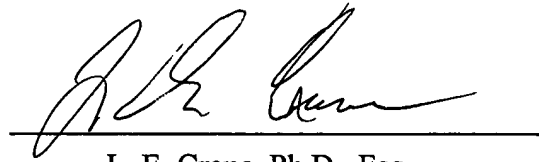
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. S. Anna Jiang, can be reached at **571-272-0627**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is **571-272-1600**.

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LECrane:lec  
10/02/2006

A handwritten signature in black ink, appearing to read "L. E. Crane", is written over a horizontal line.

L. E. Crane, Ph.D., Esq.  
Primary Patent Examiner  
Technology Center 1600

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/048,033  
Source: 1FW/b  
Date Processed by STIC: 4/3/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>>** , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

10/048,033

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics    The number/text at the end of each line "wrapped" down to the next line. This may occur if your file  
     Wrapped Aminos        was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will  
                               prevent "wrapping."
  
- 2      Invalid Line Length    The rules require that a line not exceed 72 characters in length. This includes white spaces.
  
- 3      Misaligned Amino    The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers;  
     Numbering                use space characters, instead.
  
- 4 ✓ Non-ASCII                The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please  
                               ensure your subsequent submission is saved in ASCII text.
  
- 5      Variable Length        Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules,  
                               each n or Xaa can only represent a single residue. Please present the maximum number of each  
                               residue having variable length and indicate in the <220>-<223> section that some may be missing.
  
- 6      PatentIn 2.0        A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid  
     "bug"                    sequences(s)     . Normally, PatentIn would automatically generate this section from the  
                               previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to  
                               the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for  
                               Artificial or Unknown sequences.
  
- 7      Skipped Sequences    Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
     (OLD RULES)                (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                                       (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                                       (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                                       This sequence is intentionally skipped  
                                       Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
  
- 8      Skipped Sequences    Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
     (NEW RULES)                <210> sequence id number  
                                       <400> sequence id number  
                                       000
  
- 9      Use of n's or Xaa's    Use of n's and/or Xaa's have been detected in the Sequence Listing.  
     (NEW RULES)                Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                                       In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
  
- 10      Invalid <213>        Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or  
     Response                    scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or  
                                       is Artificial Sequence. (see item 11 below)
  
- 11      Use of <220>        Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses. Use  
                                       of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown."  
                                       Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as  
                                       explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of  
                                       Sequence Rules
  
- 12      PatentIn 2.0        Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,  
     "bug"                    resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence  
                                       listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
  
- 13      Misuse of n/Xaa        "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFW16

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/048,033

DATE: 04/03/2006

TIME: 15:16:35

Input Set : A:\PTO.TS.txt

Output Set: N:\CRF4\04032006\J048033.raw

*see item 4  
on Enr summary  
Sheet*

3 <110> APPLICANT: Celmed Oncology (USA), Inc.  
 4 Shepard, Michael H.  
 6 <120> TITLE OF INVENTION: Methods for treating therapy-resistant tumors  
 8 <130> FILE REFERENCE: 060925-0601  
 10 <140> CURRENT APPLICATION NUMBER: US 10/048,033  
 11 <141> CURRENT FILING DATE: 2002-11-27  
 13 <150> PRIOR APPLICATION NUMBER: PCT/US00/20007  
 14 <151> PRIOR FILING DATE: 2000-07-21  
 16 <150> PRIOR APPLICATION NUMBER: US 60/145,364  
 17 <151> PRIOR FILING DATE: 1999-07-22  
 19 <150> PRIOR APPLICATION NUMBER: US 60/153,855  
 20 <151> PRIOR FILING DATE: 1999-09-14  
 22 <160> NUMBER OF SEQ ID NOS: 6  
 24 <170> SOFTWARE: PatentIn version 3.3

*pg 1-2*

## ERRORED SEQUENCES

87 <210> SEQ ID NO: 6  
 88 <211> LENGTH: 26  
 89 <212> TYPE: DNA  
 90 <213> ORGANISM: Artificial  
 92 <220> FEATURE:  
 93 <223> OTHER INFORMATION: used for PCR amplification  
 95 <400> SEQUENCE: 6  
 96 gaaggtagcc taaacagcca ttcca

*same response as  
seq. 5-6*

**Does Not Comply  
Corrected Diskette Needed**

*what is its source? see item 11  
on Enr summary  
Sheet*

E--> 102 1  
 E--> 105 1  
 E--> 107 3

*delete*

26

10/048,033

2

<210> 2  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> (corresponding to bases 564-583)

<400> 2  
ggtcaactcc ctgtcctgaa

insufficient explanation - give  
source of genetic  
material

20

↓  
same error  
in sequence 4



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/048,033

DATE: 04/03/2006

TIME: 15:16:36

Input Set : A:\PTO.TS.txt

Output Set: N:\CRF4\04032006\J048033.raw

L:102 M:254 E: No. of Bases conflict, this line has no nucleotides.  
M:254 Repeated in SeqNo=6